bodies, or naturally dystrophic waters may be excluded from some or all numerical criteria as stated in LAC 33:IX.1109. Although naturally occurring variations in water quality may exceed criteria, water quality conditions attributed to human activities must not exceed criteria when flows are greater than or at critical conditions (as defined in LAC 33:IX.1115.C).

1. pH. The pH shall fall within the range of 6.0 to 9.0 unless natural conditions exceed this range or where otherwise specified in the table (LAC 33:IX.1123). No discharge of wastes shall cause the pH of a water body to vary by more than one pH unit within the specified pH range for the subsegment where the discharge occurs.

2. Chlorides, Sulfates, and Total Dissolved Solids. Numerical criteria for these parameters generally represent the arithmetic mean of existing data from the nearest sampling location plus three standard deviations. For estuarine and coastal marine waters subsegments in Table 3 that have no listed criteria (i.e., designated N/A), criteria will be established on a case-by-case basis using field determination of ambient conditions and the designated uses. For water bodies not specifically listed in the Numerical Criteria and Designated Table, increases over background levels of chlorides, sulfates, and total dissolved solids may be permitted. Such increases will be permitted at the discretion of the department on a case-by-case basis and shall not cause in-stream concentrations to exceed 250, 250, and 500 mg/L for chlorides, sulfates, and total dissolved solids, respectively, except where a use attainability analysis indicates that higher levels will not affect the designated uses. In permitting such increases, the department shall consider their potential effects on resident biota and downstream water bodies in addition to the background conditions. Under no circumstances shall an allowed increase over background conditions cause any numerical criteria to be exceeded in any listed water body or any other general or numerical criteria to be exceeded in either listed or unlisted water bodies.

3. Dissolved Oxygen. The statewide dissolved oxygen (DO) values represent minimum criteria for the types of water specified. (That is, a level below the criterion, as opposed to above the criterion, may indicate potential impairment.) These DO criteria are designed to protect indigenous wildlife and aquatic life species associated with the aquatic environment and shall apply except in those water bodies that have ecoregional-specific or site-specific criteria, or where exempted or excluded elsewhere in these standards. DO criteria for specific state water bodies are contained in LAC 33:IX.1123. Naturally occurring variations below the criterion specified may occur for short periods (for a few hours each day). These variations reflect such natural phenomena as the reduction in photosynthetic activity and oxygen production by plants during hours of darkness. However, no waste discharge or human activity

33:IX.1105.

b. Estuarine Waters. For estuarine wa
criterion is 4 mg/L.

c. Coastal Marine Waters (Includin
Gulf of Mexico). For coastal marine waters, the
is 5 mg/L.

4. Temperature

a. The temperature criteria enumerated
in most cases represent maximum values o
existing data. In a few cases, however, a limite
unusually high temperatures in the range of
(95-97°F) have been deleted because these
believed to have been recorded during c
unseasonably high temperatures and/or unusual
or water levels and therefore do not repre
maximum temperatures.

b. The criterion consists of two parts, a
differential and a maximum temperature. The
differential represents the maximum permiss
above ambient conditions after mixing. N
process heat shall be added once the ambient
reaches the maximum temperature specified in t
except under natural conditions such as unusu
weather, as provided for in LAC 33:IX.1113.C.4

i. Fresh Water. The following
standards apply to fresh water:

(a). maximum of 2.8°C (5°F) rise ab
for streams and rivers;

(b). maximum of 1.7°C (3°F) rise ab
for lakes and reservoirs; and

(c). maximum temperature of 32
except where otherwise listed in the tables
temperature may be varied on a case-by-case b
for the effects of natural conditions such as u
and/or dry weather.

ii. Estuarine and Coastal Waters. T
temperature standards apply to estuarine and co

(a). maximum of 2.2°C (4°F) rise ab
from October through May;

(b). maximum of 1.1°C (2°F) rise ab
from June through September; and

(c). maximum temperature of 3
except when natural conditions elevate tempe
this level.

c. These temperature criteria shall n
privately owned reservoirs or to reservoirs const
for industrial cooling purposes.